Cost Allocation Methodologies (CAM)

TOOLKIT

Helping States Determine Equitable Distributions of Software Development Costs to Benefiting Programs Over the System Development Lifecycle

CAM Handbook

Revised – December 2014

PREFACE

The CAM Toolkit is funded by a grant from the United States Department of Health and Human Services (DHHS), Administration for Children and Families (ACF), Office of Child Support Enforcement (OCSE).

The CAM Toolkit was originally published in May 2004, with an update in December 2014.

We welcome additional comments and suggestions from those using this Toolkit. Please submit comments to the lead federal analyst(s) assigned to your project.

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TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION 7

CAM TOOLKIT'S PURPOSE 7

CAM TOOLKIT'S AUDIENCE 7

CAM TOOLKIT'S CONTENTS 7

CAM TOOLKIT SCOPE 8

COST ALLOCATION CHALLENGES AND POTENTIAL SOLUTIONS 9

CHAPTER 2: COST ALLOCATION OVERVIEW 10

CONTEXT 10

KEY CONCEPTS OF COST ALLOCATION 10

COST ALLOCATION STAKEHOLDERS 12

COST ALLOCATION PLANNING TEAM 12

FEDERAL FUNDING OF STATE SYSTEMS 12

ADVANCE PLANNING DOCUMENT (APD) AND COST ALLOCATION REQUIREMENTS 14

COST ALLOCATION AUTHORITIES 14

COST ALLOCATION FOR SYSTEM DEVELOPMENT SUMMARY CHART 14

CHAPTER 3: PLANNING APD WITH COST ALLOCATION PLAN 16

DEFINED PROCESS 16

COST ALLOCATION PLAN FOR SYSTEM PLANNING CONTENTS 17

EXAMPLE OF A COST ALLOCATION EXHIBIT FOR SYSTEM PLANNING 17

CHAPTER 4: IMPLEMENTATION APD WITH COST ALLOCATION PLAN 19

COST ALLOCATION DECISION FLOW 19

DEFINED PROCESS 23

ACTIVITY 1: DOCUMENT SYSTEM AND COST ALLOCATION INFORMATION 28

ACTIVITY 2: DOCUMENT BENEFITING PROGRAMS' SYSTEM USAGE 30

ACTIVITY 3: PROCESS SYSTEM USAGE 31

ACTIVITY 4: PREPARE COST ALLOCATION PLAN WITH EXHIBIT 32

ACTIVITY 5: GET COST ALLOCATION PLAN (CAP) APPROVAL 33

ACTIVITY 6: REPORT ACTUAL COSTS; IF NEGOTIATED INTERIM PERCENTAGE, MAKE COST ADJUSTMENTS AS REQUIRED 33

COST ALLOCATION PLAN FOR IMPLEMENTATION APD CONTENTS 34

EXAMPLE OF A COST ALLOCATION EXHIBIT FOR SYSTEM IMPLEMENTATION 34

APPENDIX A: GLOSSARY **37**
APPENDIX B: COST ALLOCATION RESOURCES **41**
APPENDIX C: COST ALLOCATION LESSONS LEARNED **43**
APPENDIX D: CHILDREN'S BUREAU SECONDARY COST ALLOCATION **44**

LIST OF TABLES

Table 1. Federal/State Match Rates 13
Table 2. Cost Allocation Documents in APD Process 14
Table 3. Sample Planning APD Cost Allocation Exhibit 17
Table 4. Sample IAPD Cost Allocation Exhibit 35

LIST OF FIGURES

Figure 1. Cost Allocation for System Development 15
Figure 2. IAPD ProcessFlow 20
Figure 3. Benefit Received CAM Process 23

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Chapter 1: Introduction

Welcome to the Cost Allocation Methodology (CAM) Toolkit.

This CAM Toolkit is made available to Federal, State, and local agencies through a collaboration between the U.S. Department of Health and Human Services (DHHS), Administration for Children and Families (ACF), Office of Child Support Enforcement (OCSE); the U.S. Department of Agriculture (USDA), Food and Nutrition Service (FNS); and representatives from States of Kansas and Texas. All contributors shared their extensive experience in cost allocation to assist with development of this CAM Toolkit. It has been revised and updated in December 2014.

CAM Toolkit's Purpose

The CAM Toolkit's purpose is to model a simple, consistent, and objective cost allocation methodology to:

- Help States determine equitable distributions of software development costs to Federal and State benefiting programs over the system development lifecycle.
- Help expedite the Federal approval process for State Cost Allocation Plans.

CAM Toolkit's Audience

This Toolkit is designed for those who are typically responsible for cost allocation planning and implementation for State automated systems supporting Federal and State public assistance programs.

- National office (Federal) financial staff who review and approve State Cost Allocation Plans
- Regional office staff (Federal) who review State Cost Allocation Plans
- State, Tribal (where applicable), and local agency financial and information technology (IT) staff who help prepare Cost Allocation Plans based on system development needs.
- Contractors who provide data to support State cost allocation methodologies

CAM Toolkit's Contents

In the CAM Toolkit, you will find:

- CAM Handbook (MS Word)

  The CAM Handbook presents a comprehensive introduction to cost allocation. It contains practical guidance on preparing Cost Allocation Plans throughout the system lifecycle in conjunction with the Federal Advance Planning Document (APD) process.

  - New users will benefit from reading CAM Handbook Chapters1-4 in sequence.

- Experienced users may want to read Chapters 1 and 2, review the CAM process charts in Appendix D, and then read the process explanations in Chapters 3 and 4 as needed.
- Users whose Benefiting Program partners include the Department of Health and Human Services, Administration for Children and Families, Children's Bureau should consult Appendix E, Children's Bureau Secondary Cost Allocation.

- CAM-TOOL (MS Excel)

  This MS Excel tool provides a consistent, objective cost allocation process you can use to identify all Federal and State benefiting programs and to calculate an equitable distribution of software development costs among those benefiting programs. A series of worksheets walks you through the cost allocation process. The CAM-TOOL helps you prepare the Cost Allocation Plan for an Implementation Advanced Planning Document (IAPD). The CAM-TOOL is designed for intermediate MS Excel users.

- CAM-TOOL User Guide (MS Word)

  This User Guide supplements the on-screen help available within the CAM-TOOL itself. The User Guide contains step-by-step procedures and screen displays to illustrate how to capture and analyze the data needed to produce equitable distributions of software development costs to Federal and State benefiting programs.

- CAM-TOOL Sample Files

  Three MS Excel files are available with sample cost allocation scenarios pre-loaded. They are: 1) a simple data example; 2) a complex data example; and 3) a simple example with weighted data.

The CAM Toolkit and supporting files are available at ACF, CMS, and FNS websites at http://www.acf.hhs.gov/programs/css/resource/cost-allocation-methodologies-toolkit-0, http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Data-and-Systems/Data-and-Systems.html, or http://www.fns.usda.gov/apd/cam-toolkit

CAM Toolkit Scope

State agencies incur system costs throughout the system lifecycle. These costs fall into four categories:

- System planning
- Software development
- Hardware
- Operations and System Maintenance

The CAM Toolkit addresses cost allocation for system planning and software development only. For additional information, please see Appendix B, Cost Allocation Resources, Guides and Handbooks, State Systems APD Guide.

For information on cost allocation related to operations and maintenance, please refer to the Division of Cost Allocation (DCA), U.S. Department of Health and Human Services, Office of the Secretary, Office of the Assistant Secretary for Administration and Management, Program Support Center, Financial Management Service. The DCA Website is: https://rates.psc.gov/ . For additional information, please see Appendix B, Cost Allocation Resources, Code of Federal Regulations (CFR) Authorities, Title 45 CFR Part 95, Subparts E and F.

For additional information on applicable accounting principles and standards, please refer to Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments." Please note that OMB Circular A-87 is now in regulation at Title 2 CFR Part 225.

Cost Allocation Challenges and Potential Solutions

During fact-finding interviews conducted in October/November, 2003, a stakeholder group of Federal and State agency representatives identified three types of cost allocation challenges:

- Lack of cost allocation knowledge
- Need for a defined cost allocation process
- Specific issues with cost allocation implementation, for example, timeframes for Cost Allocation Plan approval and guidance for small programs' cost allocation

As contributing causes, the group identified:

- Sporadic/infrequent needs for performing cost allocation
- Loss of cost allocation experience due to staff turnover

The group proposed the following solutions:

- Create a cost allocation training resource that could be a refresher for experienced State and Federal workers and a primer for new staff
- Define and model a cost allocation process, with automated tool support, to promote consistent and objective cost allocation outcomes for benefiting programs
- Encourage cost allocation best practices and the use of lessons learned among the States

Chapter 2: Cost Allocation Overview

Context

State agencies almost universally use automated computer systems to administer, or supervise the administration of multiple Federal and State public assistance programs under the Social Security Act. The Federal programs include the Supplemental Nutrition Assistance Program (SNAP), Medicaid, Temporary Assistance to Needy Families (TANF), Child Care, Child Support Enforcement, Medicaid, and Child Welfare programs as well as other Federal refugee assistance programs. Federal funding is available to help State agencies develop, maintain, operate, and update the automated systems they use to administer Federal public assistance programs.

Increasingly, as new technologies and new approaches like enterprise architecture have become available, the States are integrating their systems to administer several Federal and State programs simultaneously. Equitable cost sharing is very important because system integration and modernization costs are substantial, with software development usually the single largest cost item at over 50% of total system costs.

Key Concepts of Cost Allocation

A few key concepts can help you assist your State agency or Federal program in equitably distributing, or "allocating" shared system costs. These key concepts are highlighted in **bold** and are described below.

Cost allocation is a procedure that State agencies use to identify, measure, and equitably distribute system costs among benefiting State and Federal public assistance programs.

Benefiting program means a State or Federal public assistance program that uses capabilities in a State's automated system to help its personnel perform a program function. As an example, the State of Arizona's AZTECS system helps caseworkers determine an applicant's eligibility for multiple programs' services, including Temporary Assistance to Needy Families (TANF), SNAP, and Medicaid. In this example, TANF, SNAP, and Medicaid are all "benefiting programs" of the AZTECS system and share its costs.

Cost allocation involves identifying:

- **Direct costs** (for system functions benefiting a single Federal or State program)
- **Shared costs** (for system functions benefiting two or more Federal or State programs)

Direct costs are charged only to the single benefiting program. Shared costs must be allocated, or fairly distributed, among all the benefiting programs.

Please refer to Office of Management and Budget (OMB) Circular A-87 at 2 CFR 225 for applicable accounting principles and standards.

Cost allocation methodology means the specific method, or approach, the State agency uses to determine each benefiting program's portion of the shared system costs. There is no "right" cost allocation methodology. For each system development, stakeholders in the State agency and Federal benefiting programs work together to develop a mutually agreeable cost allocation methodology. Using this methodology, they determine the proportionate percentage and dollar amount of cost sharing for each benefiting program.

Cost allocation methodology for system planning is generally a simplified allocation based on "any reasonable method." For example, when allocating shared costs for planning a State system upgrade, the State agency may simply allocate equal cost shares to major benefiting programs.

Refer to Chapter 3 of this Handbook for a defined process for system planning cost allocation.

Cost allocation methodology for software development is generally a more complex allocation based on "Benefit Received." Benefit Received takes into account the benefiting programs' overall and specific usage of system capabilities, and the level of effort involved to create or modify these system capabilities, adjusted for complexity.

NOTE: Benefit Received as used in cost allocation methodology should not be confused with benefits such as cash assistance or SNAP benefits distributed to recipients eligible for public assistance.

Refer to Chapter 4 of this Handbook for a defined process for software development cost allocation.

Cost Allocation Plan (CAP) is the document that State agencies submit to Federal benefiting programs for approval during the Advance Planning Document (APD) process to obtain Federal funding for a portion of State system costs for system planning and software development. The Cost Allocation Plan documents the State agency's cost allocation methodology and shows the proposed Program Share of Cost (%) and Share Amount ($) for each benefiting program. Each Federal benefiting program must approve the State agency's Cost Allocation Plan.

Duplicated Recipient Count is used to distinguish between "large" and "small" benefiting programs. In a duplicated count of all of the programs that benefit from information system recipients are counted more than once if they are recipients in more than one of the benefiting programs.

Title IV-E Participation Rate is used in the calculation of FFP for projects that support the Child Welfare (title IV-E) program. The rate is the proportion of children served by the State or Tribal child welfare program that also meet title IV-E program eligibility requirements. Child welfare projects that meet Statewide Automated Child Welfare Information System requirements at 45 CFR Part 1355.50–57 may be eligible for 50% FFP for development activities. Non-SACWIS development efforts must apply the title IV-E participation rate to FFP claims. See Appendix D for additional information on calculating the FFP rate for child welfare projects.

Cost Allocation Stakeholders

Benefiting Federal and State program staff who need to be included in the cost allocation process are:

- Federal program and financial management staff. Depending on the Federal program, these staff are located either in a Regional Office (for example, U.S. Department of Agriculture Food and Nutrition Service) or in the Federal Agency headquarters (for example, Department of Health and Human Services, Administration for Children and Families, Office of Child Support Enforcement or the Centers for Medicare & Medicaid Services, Center for Medicaid and CHIP Services, Division of State Systems).
- State Program staff
- System (Information Technology) staff
- State Program staff (SNAP, TANF, Medicaid, etc. as well as State public assistance programs using the system)
- State financial management/accounting staff
- Contractors (if applicable)

Cost Allocation Planning Team

States have learned that building an effective cost allocation planning team is a critical success factor in preparing and gaining approval of Cost Allocation Plans. It is imperative that the State agency creates its cost allocation team early in the system planning process. This team should be cross-functional and should include representatives from program, technical, and financial management staff. Depending on the business environment, contractor staff may also need to be included.

On this cost allocation team, the technical team members communicate the system's technical structure. Program staffs then use the system's technical structure as a framework to identify their program's functional usage of the system. Financial management staff help to identify or establish cost reporting data to support the cost allocation to benefiting programs based on Benefit Received from system usage.

At the outset, the State agency cost allocation team should also establish communication with Federal benefiting program representatives. The State team can describe the cost allocation methodology approach it is considering and get helpful feedback from its Federal benefiting program representatives. The earlier in the cost allocation process the State and Federal representatives begin working together, the more likely there will be "no surprises" when the Cost Allocation Plan gets submitted for approval.

Federal Funding of State Systems

Federal agencies provide funding to State agencies administering Federal public assistance programs. This funding is called Federal Financial Participation (FFP). Different Federal agencies offer different match rates of 50% or more for State agency system costs.

Federal agencies use the Advance Planning Document (APD) process to receive and approve State agency requests for Federal Financial Participation (FFP) for systems with anticipated total acquisition costs (both Federal and State funds) of $5M or more. (When Federal funding goes to States as a block grant, such as for the TANF and Child Care programs, there are no APD requirements). As part of the APD process, State agencies are required to submit cost allocation information beginning with State agency system planning and continuing through system development and operations.

Table 1 shows match rates and Advance Planning Document requirements for several major Federal public assistance programs.

Table 1. Federal/State Match Rates

Program	Federal Agency	Nature of funding	Federal/State match rate	APD?
TANF	Administration for Children and Families, HHS	Block grant	No State match required	No
Medicaid – eligibility	Centers for Medicare and Medicaid Services, HHS	Entitlement	50/50 for system development and operations	Yes
Medicaid – claims processing	Centers for Medicare and Medicaid Services, HHS	Entitlement	90/10 for system development 75/25 for system operations	Yes
Child Care	Administration for Children and Families, HHS	Block grant	No State match required	No
Child Support Enforcement	Administration for Children and Families, HHS	Entitlement	66/34 for system development and operations	Yes
Child Welfare[1]	Administration for Children and Families, HHS	Entitlement	50/50 for system development and operations[1]	Yes
SNAP	Food and Nutrition Service, USDA	Entitlement	50/50 for system development and operations	Yes

[1] Note there is a different FFP rate for SACWIS and non-SACWIS development activities. See Appendix D for more information.

Advance Planning Document (APD) and Cost Allocation Requirements

The APD process requires different types of Advance Planning Documents when requesting Federal Financial Participation (FFP) at different stages of system development. Table 2 shows the APD documents, and their corresponding Cost Allocation documents for system planning and system development.

Table 2. Cost Allocation Documents in APD Process

APD Document	FFP requested for:	Cost Allocation Document	Cost Allocation Plan Content
Planning APD (PAPD)	System planning costs	Cost Allocation Plan	FNS 901 Handbook - Section 7.3
Implementation APD (IAPD)	System development costs	Cost Allocation Plan	FNS 901 Handbook - Section 7.3

Cost Allocation Authorities

There are several authorities from Federal appropriations law and implementing regulations that identify cost allocation requirements for State agencies requesting FFP.

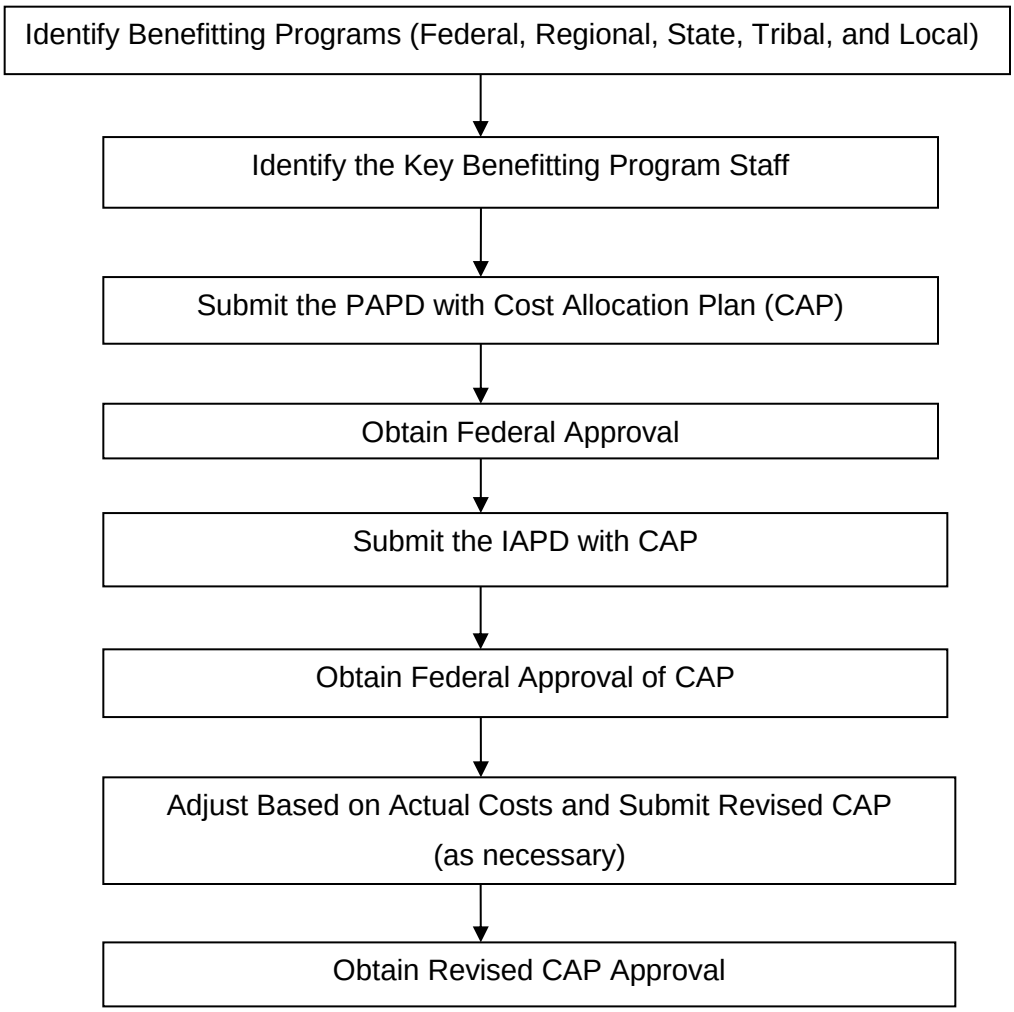
For additional information on authorities, see Appendix B, Cost Allocation Resources.

Cost Allocation for System Development Summary Chart

Figure 1 illustrates the sequence of State agency cost allocation activities and Federal program cost allocation approvals throughout the system lifecycle.

As Figure 1 indicates, it is possible, but not encouraged, to start software development without final Cost Allocation Plan (CAP) approval. In that case, benefiting programs and the State agency negotiate temporary approval of an interim cost allocation methodology and the Program Share of Cost percentage so that the State agency can begin software development. The State agency continues working with benefiting programs to gain final approval of its CAP with the Benefit Received cost allocation methodology and the final Program Share of Cost percentage. The major drawback to a negotiated interim percentage is that it often results in the need for the State agency to make retroactive cost reimbursements to some or all benefiting programs.

Figure 1. Cost Allocation for System Development



Chapter 3: Planning APD with Cost Allocation Plan

Defined Process

This chapter presents a set of questions and answers to walk you through each element of this defined process. In this chapter, you will also find information on what to include in your Cost Allocation Plan and a basic example of a cost allocation for system planning.

Question 1. Does Planning This System Require a Cost Allocation Plan?

In the APD process, State agencies are required to submit a Cost Allocation Plan for approval as part of their Planning APD (PAPD) documentation when:

1. Total project costs (Federal and State funds) are anticipated to be $5M or more. (This amount is based on the total anticipated outlay, including costs both for planning and subsequent development/implementation.); and
2. The system will benefit two or more Federal programs.

These are the minimum requirements for a State agency request for Federal Financial Participation. The Cost Allocation Plan will also need to take State programs into account if the system will benefit one or more State programs.

NOTE: Systems development of less than $5 million total cost does not require submittal of a Cost Allocation Plan to Federal agencies. However, according to Federal cost accounting standards, some allocation method must be in place to equitably share costs that benefit two or more agencies. See OMB Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments" at 2 CFR 225.

Question 2. Who Should Participate?

It is important to establish an interdisciplinary cost allocation planning team early in the process. This planning team should include representatives from:

- State benefiting programs, if any
- State technical staff
- State financial management staff
- State contractor staff, if any
- Federal benefiting programs

The planning team should establish and maintain contact with Federal benefiting program representatives throughout the cost allocation process. Depending on the Federal program, these staff are located either in a Regional Office (for example, U.S. Department of Agriculture Food and Nutrition Service) or in the Federal Agency headquarters (for example, Department of Health and Human Services, Administration for Children and Families, Office of Child Support Enforcement). Please refer to

Appendix C, Cost Allocation Lessons Learned, for states' experience in building successful cost allocation teams.

For the planning phase the cost allocation methodology can be based on any reasonable method that is agreed upon by all the programs involved.

Question 3. What is the Approval Process for Cost Allocation Plans for System Planning?

Each benefiting Federal program approves its Share of Cost (%) and Share Amount ($) based on the proposed cost allocation methodology. Federal Financial Participation begins when all Federal benefiting programs approve. When one or more Federal funding agencies does not approve the methodology, costs cannot be charged to that Agency. In order to claim costs, the State agency must revise its submittal to receive concurrence with its methodology from all participating Federal agencies.

Cost Allocation Plan for System Planning Contents

As described in the State Systems APD Guide, the Cost Allocation Plan (CAP) should contain:

- A narrative section identifying the benefiting State and Federal programs and describing the cost allocation methodology to be used to allocate their shared system costs
- An exhibit (in table format) showing each State and Federal program's Share of Cost (%) and Share Amount ($) that results from applying the proposed cost allocation methodology.

Example of a Cost Allocation Exhibit for System Planning

Here's a basic example of a cost allocation for planning a State system upgrade.

The estimated system planning budget is $300,000. The three major benefiting Federal programs are SNAP, Medicaid, and Child Support. No State public assistance programs are included in this cost allocation. The State's proposed cost allocation methodology is to allocate equal planning cost shares to the three major benefiting programs.

Table 3 illustrates this example's cost allocation exhibit required as part of the Planning APD Cost Allocation Plan. The exhibit shows each benefiting program's Share of Cost (%) and Share Amount ($) resulting from applying the equal cost shares cost allocation methodology.

NOTE: Columns are indicated only for purposes of the example.

Table 3. Sample Planning APD Cost Allocation Exhibit

PLANNING APD COST ALLOCATION - System planning budget					$300,000
Federal/State Program	**Program Share of Cost (%)**	**Share Amount ($)**	**Match Rate**	**Federal Share ($) FFP**	**State Share ($)**
SNAP	33%	$100,000	0.5	$50,000	$50,000
Medicaid	33%	$100,000	0.5	$50,000	$50,000
Child Support	33%	$100,000	0.66	$66,000	$34,000
Total	100%	$300,000		$166,000	$134,000
Column 1	**Column 2**	**Column 3**	**Column 4**	**Column 5**	**Column 6**

Explanation:

1. **Column 1** identifies the three benefiting programs.
2. **Column 2** shows each program's share of the estimated total system planning cost as a percent of the total planning costs. Since there are three major benefiting programs, each program's equal share of cost is 33.33%.
3. **Column 3** shows the Share Amount ($) is calculated by multiplying the total planning costs times each program's Share of Cost % (from Column 2).
4. **Column 4** lists Federal program match rates.
5. **Column 5** shows the Federal Share ($) for Federal Financial Participation (FFP) is calculated by multiplying the Share Amount ($) (Column 3) times the Match Rate (Column 4).
6. **Column 6** shows State share ($) for each benefiting program is calculated by subtracting the Federal Share ($) (Column 5) from the Share Amount ($) (Column 3).

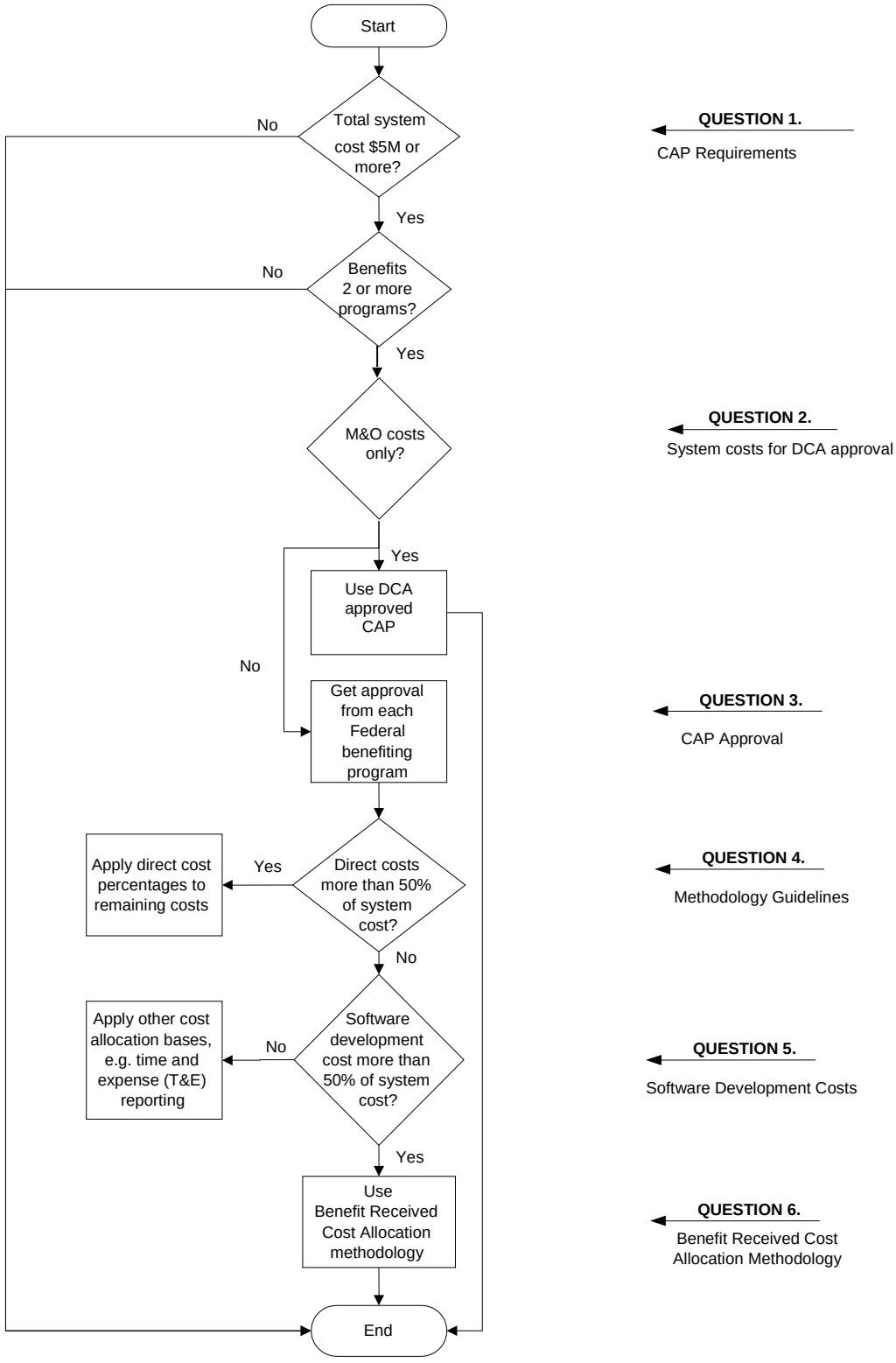
In this example, the Federal share (through FFP) from all benefiting programs would be a total of $166,000. The State agency funding share would total $134,000.

Chapter 4: Implementation APD with Cost Allocation Plan

Cost Allocation Decision Flow

When a State agency requests Federal Financial Participation (FFP) from benefiting Federal programs to implement a system, there are different cost allocation approval paths and different cost allocation methodologies depending on specific kinds of system costs. Figure 2, on the following page, shows this decision flow of approval paths and methodologies. The first part of this chapter presents a set of questions and answers that walks you through each element of the decision flow.

Figure 2. IAPD Process Flow



Question 1. Does Our System Implementation Require a Cost Allocation Plan?

As in the Planning APD process, State agencies are required to submit a Cost Allocation Plan (CAP) for approval as part of their Implementation APD (IAPD) when:

1. Total project costs (Federal and State funds) are anticipated to be $5M or more; and
2. The system will benefit two or more Federal programs

These are the minimum requirements when a State agency is requesting Federal Financial Participation. The Cost Allocation Plan will also need to take State programs into account if the system will benefit one or more State programs.

Question 2. What Kinds of System Costs Does the Division of Cost Allocation (DCA) Approve?

The Division of Cost Allocation resides in the U.S. Department of Health and Human Services, Office of the Secretary, Assistant Secretary for Administration and Management, Program Support Center, Financial Management Service. Federal benefiting programs use this service to review and approve Cost Allocation Plans including Operations and System Maintenance costs.

The DCA approval process is outside the scope of the CAM Toolkit.

Question 3. Who Approves Cost Allocation Plans for Other System-Related Costs?

Each Federal benefiting program approves Cost Allocation Plans with system-related costs not subject to approval by DCA.

Question 4. Are There Guidelines for Selecting an Appropriate Cost Allocation Methodology?

Here are three basic guidelines:

1. When direct costs (benefiting a single Federal or State program) are more than 50% of system costs, apply the direct cost percentages to remaining system costs. For example, if the direct costs to Program A were 60% of system costs, the Program A's share of remaining system costs would also be 60%.
2. When software development costs are less than 50% of system costs, apply a reasonable cost allocation methodology, for example, based on time and expense (T&E) reporting.
3. When software development costs are more than 50% of system costs, apply a cost allocation methodology based on "Benefit Received."

Question 5. What Are Software Development Costs?

Software development costs mean the costs for the engineering and management activities needed to analyze, design, test and implement software application programs. For purposes of cost allocation, software development costs include:

- Project management
- Requirements
- Design
- Development
- Testing (unit testing through user acceptance testing)
- Training (actual cost of training, but not costs for staff time during training)
- Pilot (vendor staff but not state/local staff)
- Deployment/rollout (vendor staff but not state/local staff)

Question 6. What Is the "Benefit Received" Cost Allocation Methodology, and When Is It Required?

"Benefit Received" is the name of the cost allocation methodology preferred in the APD process when software development costs are more than 50% of system costs. The goal of the Benefit Received cost allocation methodology is to distribute shared software development costs equitably among the benefiting programs.

The Benefit Received methodology is not based on client usage, i.e., recipient or caseload counts. Instead, Benefit Received is based on the State and Federal public assistance programs' usage of specific system functions and their equitable sharing of the software development costs required to produce those shared system functions.

When determining program shares of software development costs, the Benefit Received methodology can take into account the difference between small and large programs.

The Benefit Received methodology uses the following approach (as described in ACF-CMS-FNS-IM-11-18):

1. It assigns a numeric value to the work required to develop specific system functions, for example, a system-generated report.
2. It factors in a level of effort to indicate the relative complexity of the software development work. The more complex the work, the higher the level of effort required.
3. Every program that uses this specific program function benefits, i.e., gets a "Benefit Received" from its use of that function.
4. Counting up these "benefits received" by each program and comparing them to the total "Benefit Received" by all programs provides an objective methodology for assessing programs their fair share of the software development costs.

The rest of this chapter describes the defined process for this Benefit Received cost allocation methodology in more detail.

Defined Process

Figure 3, on the following pages, illustrates a defined process for the Benefit Received cost allocation methodology. This process has six major activities:

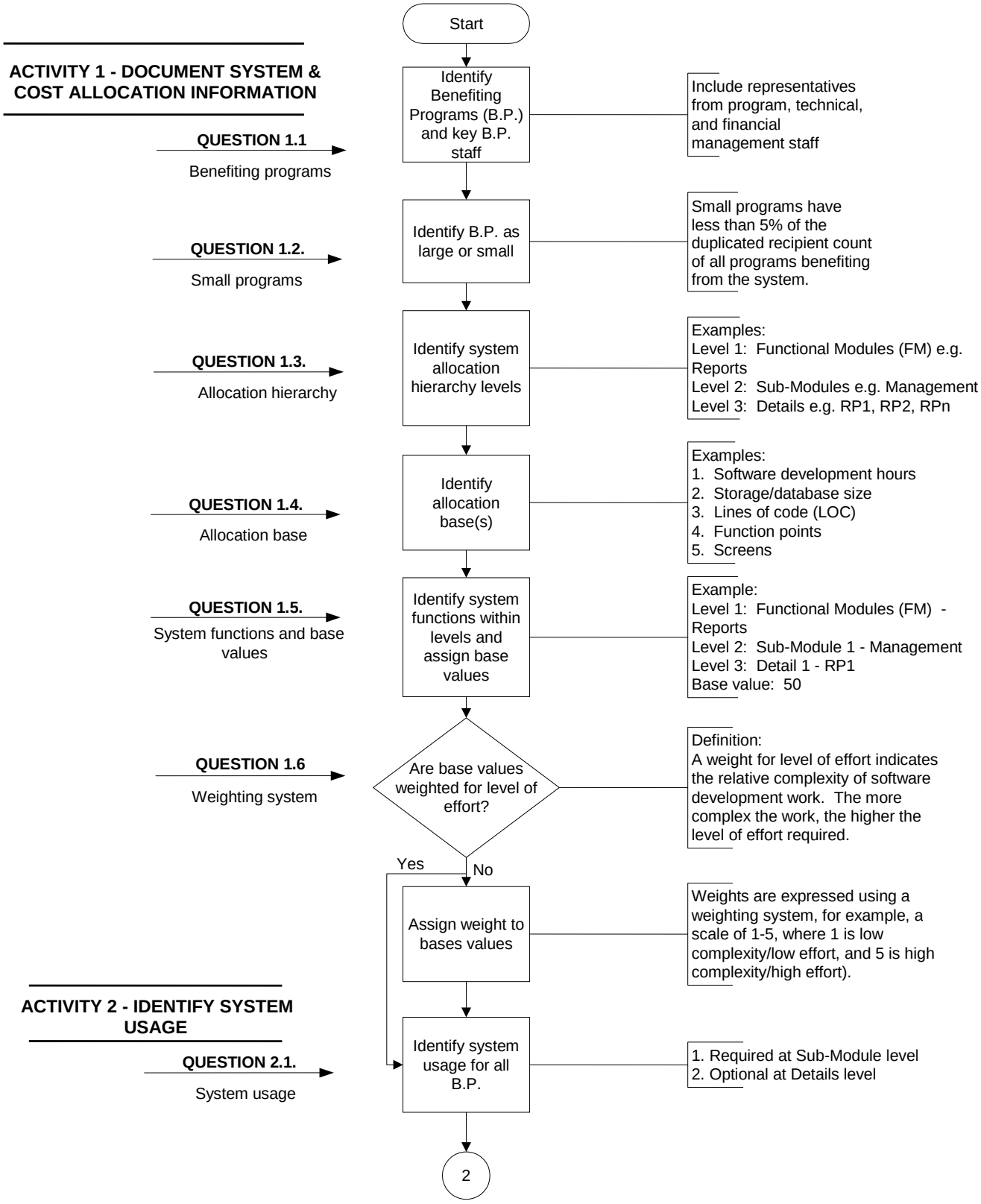
1. Document system and cost allocation information
2. Identify benefiting programs' system usage
3. Process benefiting programs' usage
    a. Direct usage – use direct charges
    b. Shared usage – use Benefit Received cost allocation methodology to determine objective Program Share of Cost %
4. Prepare Cost Allocation Plan
5. Get final Cost Allocation Plan approval or negotiate interim approval of a cost allocation methodology and Program Share of Cost %
6. Report actual costs; if interim approval, make cost adjustments to benefiting programs if required

This section of Chapter 4 presents a set of questions and answers to walk you through each of these six major activities.

NOTE: The CAM-TOOL is based on this defined process for the Benefit Received cost allocation methodology. After you review the defined process in this chapter, you can use the CAM-TOOL to assist your State in determining the Program Share of Cost % for each benefiting program.

Figure 3. Benefit Received CAM Process*

*Follows on the next 3 pages



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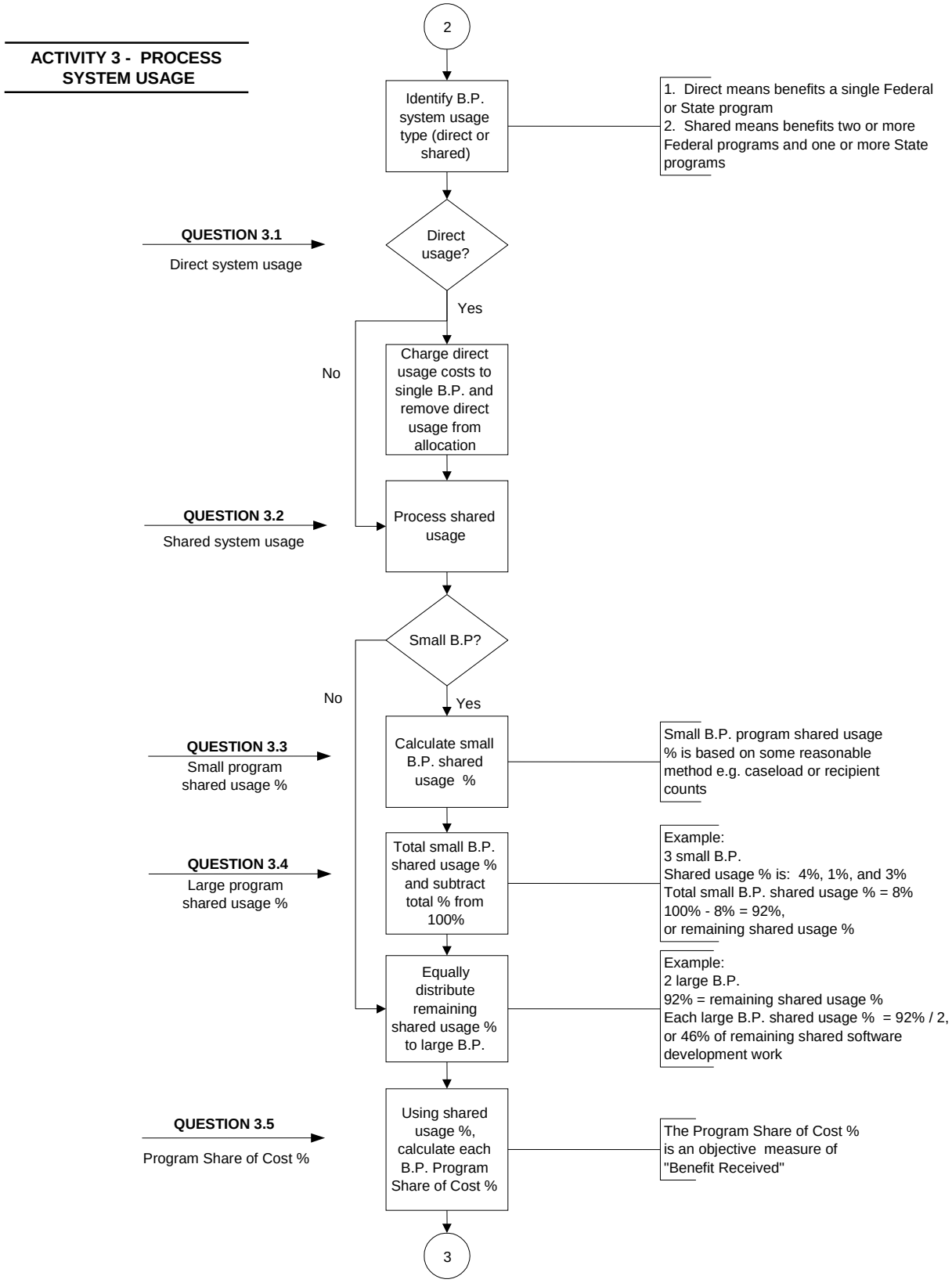

Figure 3. (continued)

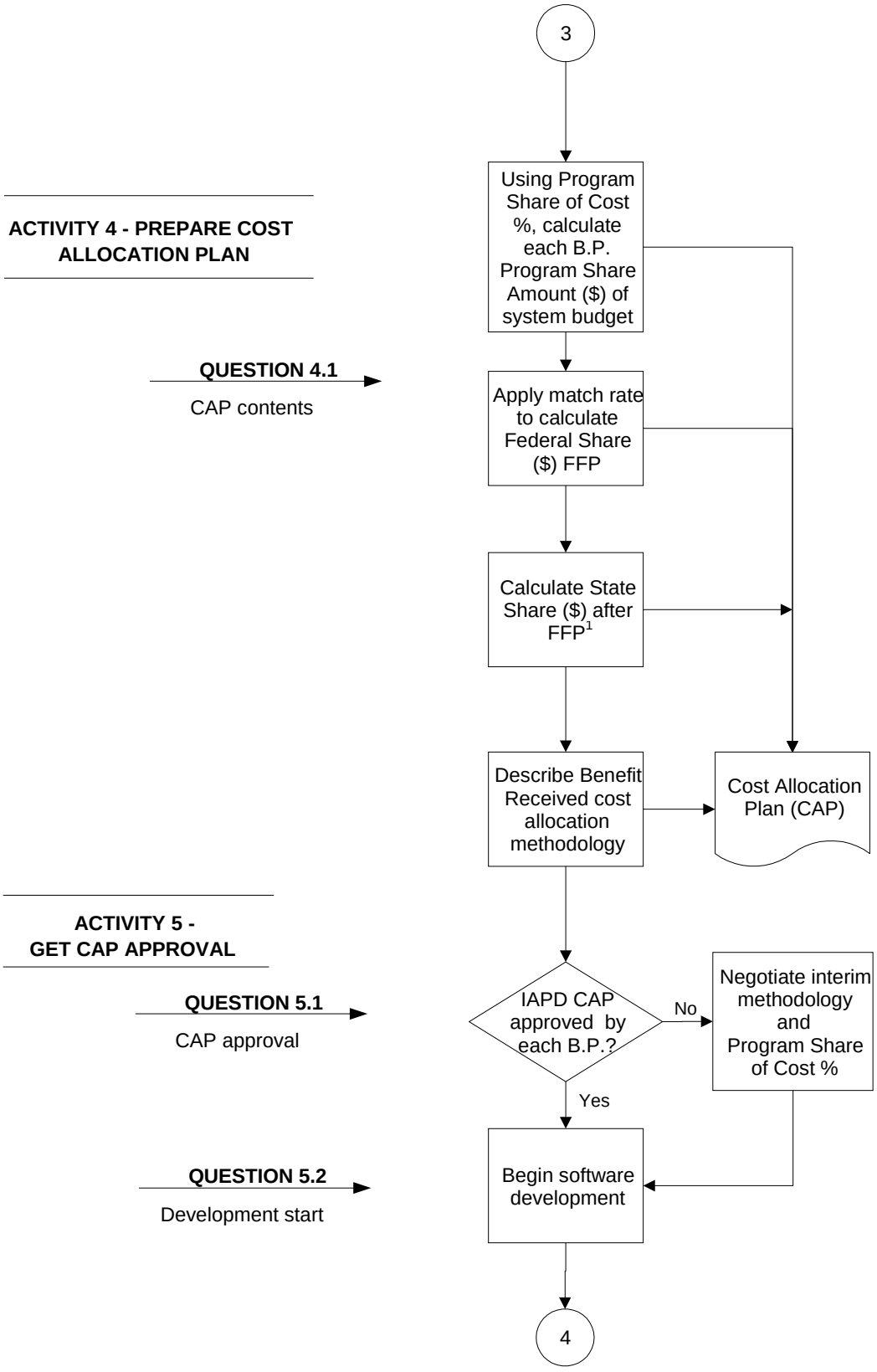

Figure 3. (continued)

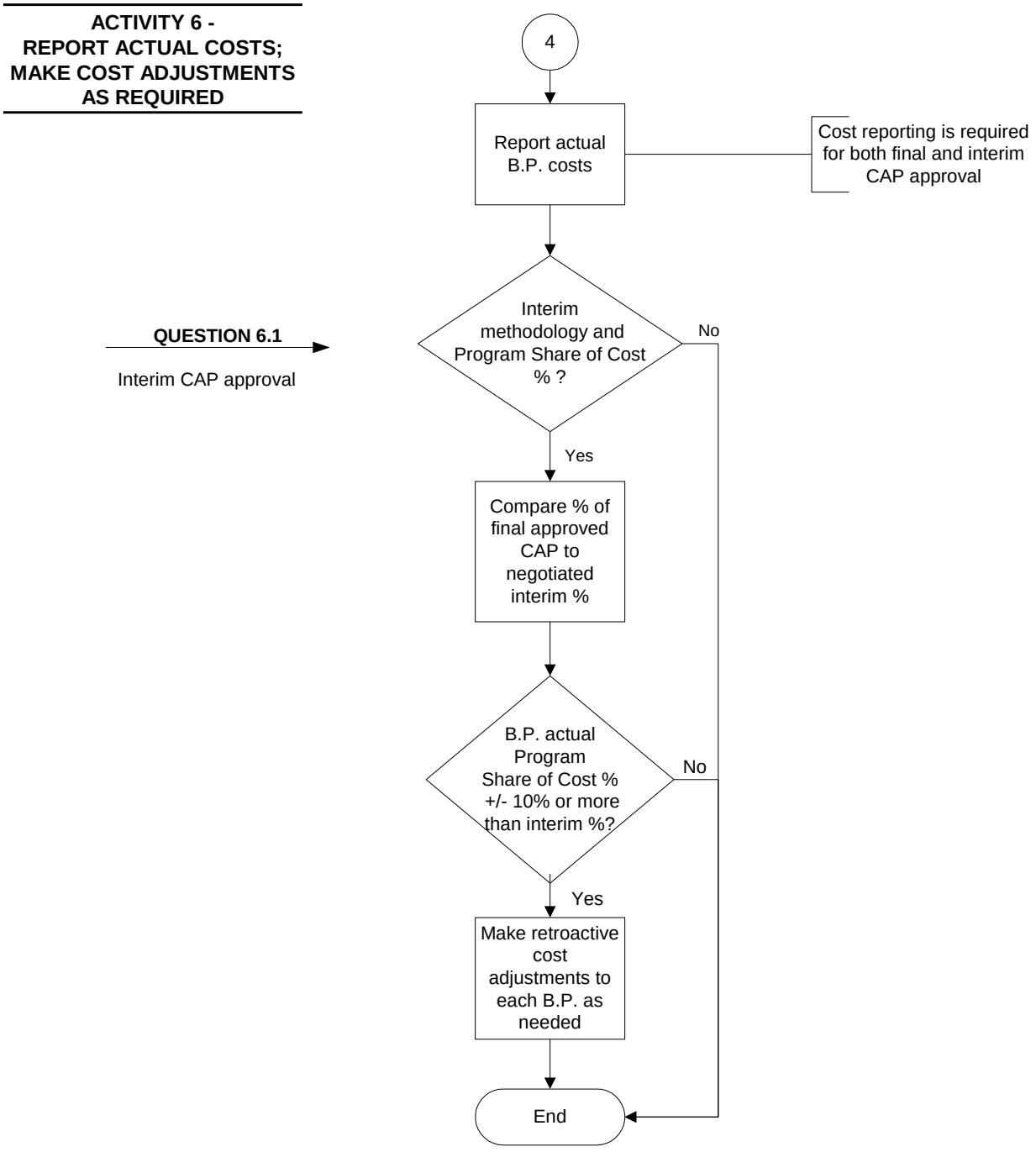

Figure 3. (continued)

[1] Note there is a different FFP rate for SACWIS and non-SACWIS development activities. See Appendix D for more information.

ACTIVITY 1: DOCUMENT SYSTEM AND COST ALLOCATION INFORMATION

Question 1.1. What Are Benefiting Programs, and Who Should Participate?

Benefiting programs are those Federal and State public assistance programs that use some or all of the functions of the system being implemented. The benefiting programs identify representatives to develop the Benefit Received cost allocation methodology for shared software development costs.

It is important to establish an interdisciplinary team early in the process of developing the Benefit Received cost allocation methodology. As in selecting a team for the Planning APD, this team should also include representatives from:

- State benefiting programs, if any
- State technical staff
- State financial management staff
- State contractor staff, if any
- Federal benefiting programs

The planning team should establish and maintain contact with Federal benefiting program representatives throughout the development of the Benefit Received cost allocation methodology.

Question 1.2. What Is the Difference between Large and Small Benefiting Programs?

The Benefit Received cost allocation methodology in general is not based on client usage of State automated system functions. However, to determine realistic cost allocations for small programs, the Benefit Received methodology does distinguish between large and small benefiting programs when determining shared usage percentage for the software development work.

For purposes of cost allocation, a program is considered small if it has less than 5% of the duplicated recipient count of the total for all benefiting programs.

When using the CAM-TOOL, you will enter the recipient counts for all benefiting programs. Then, based on the small program criteria above, you will designate each benefiting program as large or small.

Question 1.3. What Are System Allocation Structure Levels?

When developing a system with all its required program functions, Information Technology personnel organize their solution within a technical structure. One typical technical structure is a ranking with different levels of detail about system functions and the technical work needed to develop those functions. Level 1 gives the broadest view of system functions, while lower levels, e.g., Level 3 give more details. For clarity and

efficiency, the system (cost) allocation structure should map to the system's technical structure so that the Benefit Received cost allocation tracks to specific software development work.

The CAM-TOOL provides a suggested naming convention and levels for a system allocation structure. These are:

Structure	Name	Description	Example
Level 1	Functional Modules	Program Functional Areas	Reports
Level 2	Sub-Modules	Group of system activities within a Functional Module	Management
Level 3	Details	Distinct segments of system activities within a Sub-Module	RP1

Question 1.4. What Is an Allocation Base?

The allocation base is the cost allocation measurement you select to track and calculate the cost allocation for all benefiting programs. You use an allocation base or bases to capture segments of system functions used by benefiting programs, either directly or shared with other benefiting programs.

You can select one or more of the following allocation bases:

- Software development hours
- Storage/database size
- Lines of code
- Function points
- Screens
- Other (to be described)

Question 1.5. What Other Cost Allocation Information Is Needed?

Using your allocation structure levels, you identify the specific program functions (and associated software development work) at Hierarchy Level 1 (Functional Module), Level 2 (Sub Module), and optionally, at Level 3 (Detail). At the Sub-Module level, you also indicate an Allocation Type: direct or shared. Direct means only one Federal or State program uses the program function; shared means two or more Federal or State programs use the program function.

For example, you would identify:

Functional Module	SubModule	Allocation Type	Detail
Reports	Management	Shared	RP1

Next, you assign a numeric base value to each item of specific development work. For example, if you are using an allocation base of storage/database size, and RP1 requires 50KB of computer storage, its base value would be 50.

Functional Module	SubModule	Allocation Type	Detail	Base Value
Reports	Management	Shared	RP1	50

Question 1.6. What Is the Purpose of a Weighting System in the Benefit Received Cost Allocation Methodology?

If the base value already includes a weight for level of effort, you are finished describing cost allocation information. If not, you will need to assign a weight to the system functions to reflect level of effort. This weight indicates the relative complexity of the work. The more complex the work, the higher the level of effort required. You can use a weighting system of 1-5, where 1 is low complexity/low effort, and 5 is high complexity/high effort. You document your weighting system as part of your cost allocation methodology so that benefiting programs' allocated share takes into account software development level of effort.

In our example, the base value of 50 for Report 1 does not include a weight for level of effort. When you assign a weight of 2 to show the report's complexity, the weighted base value for Report 1 becomes 100 (50 * 2).

ACTIVITY 2: DOCUMENT BENEFITING PROGRAMS' SYSTEM USAGE

Question 2.1. What Is System Usage? How Is It Identified?

System usage occurs when a benefiting program uses a system function. The system usage may be direct or shared. For example, all benefiting programs use the reports function. Many benefiting programs use a system's eligibility determination function. When the benefiting program uses specific system functions, software must be developed or updated to provide those functions, and the Benefit Received cost allocation methodology must account for that system usage.

To account for system usage, you identify each benefiting program's usage for all system functions shown in your allocation structure developed in Activity 1. For example, there may be three Federal and two State programs using the system. They all use the Reports Functional Module, but they do not all use every category of reports generated by the system. Some programs use Reports 1-7 in the Management Sub-Module and others use Reports 8-12 in the Staff Sub-Module. You would enter a "tick" (Usage = X) for the two Federal and two State programs that use the Management Sub-Module . Similarly, you would enter a "tick" (Usage = X) for the one Federal and two State programs that use the Staff Sub-Module.

ACTIVITY 3: PROCESS SYSTEM USAGE

Question 3.1. In the Benefit Received Methodology, How Do We Process Direct System Usage?

In Activity 1, you assigned an Allocation Type of either direct or shared to all system functions at the Sub-Module level. When the Allocation Type is direct, only one program uses the system function. In Activity 2, when you identify system usage, you name the program, for example, SNAP, that is the single (direct) user. That program will need to be charged directly for the software development costs associated with its direct usage of that system function. As part of this process, you need to remove all the direct usage system functions from the overall cost allocation process. Otherwise, the remaining benefiting programs will be inequitably charged for developing system functions that benefit only a single program.

In practice, as system development begins, you will assign separate cost accounting codes to track direct costs and allocated costs for each benefiting program. You will present quarterly billings to your benefiting program partners; these billings should show the direct and allocated costs separately and then roll up all the benefiting program's costs (direct and allocated) into one total.

Question 3.2. In the Benefit Received Methodology, How Do We Process Shared System Usage?

In Activity 1, you assigned an Allocation Type of either direct or shared to all system functions at the Sub-Module level. When the Allocation Type is shared, more than one benefiting program uses the system function. In Activity 2, when you identified system usage, you named the programs, for example, SNAP and Medicaid, that share a system function. These programs that share a system function will share the software development costs associated with that system function.

Question 3.3. In the Benefit Received Methodology, How Do We Calculate Small Benefiting Programs' Shared Usage Percentage?

One equitable method to calculate small benefiting programs' shared usage percentage is to take their Recipient Counts into consideration. In Activity 1, you entered Recipient Counts for all benefiting programs and designated them as either large programs or small programs based on their Recipient Counts. In Activity 3, you use

these Recipient Counts to calculate the small benefiting programs' shared usage percentage for each shared system function.

Question 3.4 In the Benefit Received Methodology, How Do We Calculate Large Benefiting Programs' Shared Usage Percentage?

To determine the large benefiting programs' shared usage, you total the small benefiting programs' shared usage percentages, and subtract this total percentage from 100%. You then equally distribute this remaining shared usage percentage among the large benefiting programs.

For example, consider a system with two large and three small benefiting programs. Based on their Recipient Counts, the small benefiting programs' shared usage percentages are 4%, 3%, and 1%. The small programs' shared usage percentages totals 8% of overall shared system usage percentage. The remaining shared usage percentage is 92% (100% - 8%). You equally distribute this remaining shared usage percentage between the two large benefiting programs, that are each then responsible for 46% (92% /2) of the remaining shared software development costs.

Question 3.5. In the Benefit Received Methodology, Why and How Do We Calculate Program Share of Cost %?

In the Benefit Received methodology, you calculate Program Share of Cost % to determine each benefiting program's proportionate share of software development costs resulting from shared system usage. The Program Share of Cost % is an objective measure of "Benefit Received." You apply the Program Share of Cost % to the system's estimated/actual budget percentage to calculate each benefiting program's Share Amount ($). Federally funded programs then apply their agency match rate to determine the amount of Federal Financial Participation (FFP) funding and the required State share ($).

For each benefiting program, the Program Share of Cost % is calculated as described below.

1. Calculate a shared usage percentage for small and large benefiting programs. (See questions 3.3 and 3.4 above.)
2. Apply each program's shared usage percentage to the base value (weighted for complexity/level of effort) for each of its shared system functions.
3. Total the weighted base values that make up each program's shared system usage. Calculate a Program Share of Cost% for each benefiting program as a percentage of weighted base values for all benefiting programs' shared system usage.

ACTIVITY 4: PREPARE COST ALLOCATION PLAN WITH EXHIBIT

Question 4.1. What Do We Document in the Cost Allocation Plan?

As described in the State Systems APD Guide, the Cost Allocation Plan (CAP) should contain:

- A narrative section identifying the benefiting State and Federal programs and describing the cost allocation methodology to be used to allocate their shared system costs
- An exhibit (in table format) showing each State and Federal program's Share of Cost (%) and Share Amount ($) that results from applying the proposed cost allocation methodology.

You can use the defined process documented in this chapter as a guide to describing your Benefit Received cost allocation methodology.

ACTIVITY 5: GET COST ALLOCATION PLAN (CAP) APPROVAL

Question 5.1. Who Approves the CAP?

Each benefiting program's designated representative must approve a State agency's Cost Allocation Plan. This means that when several Federal and State programs share system functions, each program can approve or disapprove its program's proposed Program Share of Cost % and the Benefit Received cost allocation methodology behind that figure. The timeframe for final CAP approval can be several weeks or even months, depending on the kinds of questions raised and the number of methodology revisions needed to address them. The goal is to achieve Federal benefiting program approvals of the State Cost Allocation Plan concurrent with IAPD approval. When these approvals are concurrent, States and Federal benefiting programs know their Program Share of Cost (%) from the start of system implementation.

Question 5.2. Can We Start Software Development Without Final CAP Approval?

Yes. It is possible, but not encouraged, to start software development without final CAP approval. In that case, benefiting programs and the State agency negotiate temporary approval of an interim cost allocation methodology and Program Share of Cost % so that the State agency can begin software development. The State agency continues working with benefiting programs to gain final approval of its Cost Allocation Plan with the Benefit Received cost allocation methodology and the final Program Share of Cost %. The major drawback to a negotiated interim percentage is that it often results in the need for the State agency to make retroactive cost reimbursements to some or all benefiting programs. See Question 6.1 for further information.

ACTIVITY 6: REPORT ACTUAL COSTS; IF NEGOTIATED INTERIM PERCENTAGE, MAKE COST ADJUSTMENTS AS REQUIRED

Question 6.1. How Does an Interim CAP Approval Differ from a Final CAP Approval?

All benefiting programs require State agencies to report actual software development costs. Specific reporting forms may vary among benefiting programs. This reporting requirement is true for both negotiated interim percentages and final CAP approvals.

However, in the case of a negotiated interim percentage, benefiting program representatives apply a threshold test. When a benefiting Program Share of Cost % varies +/- 10% or more from the negotiated interim percentage, the State agency is required to make retroactive cost reimbursements, by quarter, to the affected benefiting programs.

Cost Allocation Plan for Implementation APD Contents

Like the Cost Allocation Plan for system planning, the Cost Allocation Plan (CAP) should contain:

- A narrative section identifying the benefiting State and Federal programs and describing the cost allocation methodology to be used to allocate their shared system costs
- An exhibit (in table format) showing each State and Federal program's Share of Cost (%) and Share Amount ($) that results from applying the proposed cost allocation methodology

Example of a Cost Allocation Exhibit for System Implementation

Here is an example of a cost allocation for implementing a State system upgrade.

The estimated system implementation budget is $15,000,000. The three major benefiting Federal programs are Child Support Enforcement, SNAP, and Medicaid. One State-only public assistance program is also included in this cost allocation. Because software development costs are anticipated to be 70% of the system costs, the State's cost allocation methodology is Benefit Received.

Table 4 on the next page illustrates the cost allocation exhibit for the Implementation APD's Cost Allocation Plan. The exhibit shows each benefiting program's Share of Cost (%) and Share Amount ($) resulting from applying the Benefit Received cost allocation methodology.

NOTE: Columns are indicated only for purposes of the example.

Table 4. Sample IAPD Cost Allocation Exhibit

IMPLEMENTATION APD COST ALLOCATION			Budget		$15,000,000
Federal/State Program	Program Share of Cost (%)	Share Amount ($)	Match Rate	Federal Share ($) FFP	State Share ($)
Child Support Enforcement	32%	$4,800,000	0.66	$3,168,000	$1,632,000
SNAP	29%	$4,350,000	0.5	$2,175,000	$2,175,000
Medicaid	26%	$3,900,000	0.5	$1,950,000	$1,950,000
State Only Program	13%	$1,950,000	0	$0	$1,950,000
Total	100%	$15,000,000		$7,293,000	$7,707,000
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6

Explanation:

1. **Column 1** identifies the four benefiting programs.
2. **Column 2** shows each program's Share of Cost % the total estimated system implementation budget. The Program Share of Cost % figures result from applying the Benefit Received cost allocation methodology to all the shared system functions.

   The Program Share of Cost % in this example is:

   - Child Support Enforcement 32%
   - SNAP 29%
   - Medicaid 26%
   - State Only program 13%
3. **Column 3** shows the Share Amount ($) is calculated by multiplying the total implementation costs times each program's Share of Cost % (from Column 2).
4. **Column 4** lists Federal program match rates.
5. **Column 5** shows the Federal share ($) for Federal Financial Participation (FFP) is calculated by multiplying the Share Amount ($) (Column 3) times the Match Rate (Column 4).
6. **Column 6** shows the State share ($) for each benefiting program is calculated by subtracting the Federal Share ($) (Column 5) from the Share Amount ($) (Column 3).

   In this example, the Federal share $ (through FFP) from each benefiting program would be:

   - Child Support Enforcement $3,168,000
   - SNAP $2,175,000
   - Medicaid $1,950,000

The State Only program is not Federally funded, so it would pay its full share of $1,950,000. Total FFP for this system is $7,293,000, and total State funding for this system is $7,707,000.

Appendix A: Glossary

Term	Definition
Advance Planning Document (APD)	A written plan of action to request funding approval for a project which will require the use of automatic data processing (ADP) services or equipment. *See APD process, Planning APD, and Implementation APD.*
Allocation base	The cost allocation measurement selected to track and calculate the cost allocation for all benefiting programs. Development hours, lines of code (LOC), and number of screens are examples of allocation bases in software development.
Allocation structure	The categorization of system functionality into levels of detail for cost allocation purposes. The cost allocation structure should correspond to the system's technical structure.
Allocation type	In cost allocation, a term used to distinguish between two kinds of system usage: 1. Direct (system function used by only one Federal or State program) 2. Shared (system function used by two or more Federal or State programs
APD process	Federal agencies use the Advance Planning Document (APD) process to receive and approve State agency requests for Federal Financial Participation (FFP) for systems with anticipated total acquisition costs (both Federal and State funds) of $5M or more.
Benefit Received	The name of the cost allocation methodology preferred in the APD process when software development costs are more than 50% of system costs. The goal of the Benefit Received cost allocation methodology is to distribute shared software development costs equitably among the benefiting programs. The Benefit Received methodology is not based on client usage, i.e., recipient or caseload counts. Instead, Benefit Received is based on the State and Federal public assistance programs' usage of specific system functions and their equitable sharing of the software development costs required to produce those shared system functions. Note: Benefit Received as used in cost allocation methodology should not be confused with benefits such as cash assistance or SNAP benefits distributed to recipients eligible for public assistance.
Benefiting program	Benefiting program means a State or Federal public assistance program that uses some or all of the functions of a State agency's automated computer system. For example, the Federal SNAP Program benefits from State computer systems that determine applicants' eligibility for SNAP benefits.
Complexity	An assessment of the relative level of effort required to develop a specific function within a software application program. The more complex the function, the more effort is required.
Cost allocation	A procedure that State agencies use to identify, measure, and equitably distribute system costs among benefiting State and Federal public assistance

Term	Definition
	programs.
Cost allocation methodology	The specific method, or approach, the State agency uses to determine each benefiting program's portion of the shared system costs.
Cost Allocation Plan (CAP)	The document that State agencies submit to Federal benefiting programs for approval during the Advance Planning Document (APD) process to obtain Federal funding for a portion of State system costs for system planning and software development. The Cost Allocation Plan documents the State agency's cost allocation methodology and shows the proposed benefiting programs' Share of Cost (%) and Share Amount ($). Each Federal benefiting program must approve the State agency's Cost Allocation Plan.
Details	In a system allocation structure, distinct segments of system activities within a Sub-Module.
Direct charges	Charges for costs of system capabilities that benefit only a single Federal or State program. In cost allocation methodology, direct charges are identified and then removed from the cost allocation pool.
Direct costs	Costs for system functions benefiting only a single Federal or State program.
Division of Cost Allocation (DCA)	The Department of Health and Human Services Division responsible for reviewing and approving Cost Allocation Plans along with the affected Operating Divisions.
Duplicated Recipient Count	This count is used to distinguish between "large" and "small" benefiting programs. In a duplicated count of all of the programs that benefit from information system, recipients are counted more than once if they are recipients in more than one of the benefiting programs.
Federal Financial Participation (FFP)	The Federal Government's share of expenditures made by a State agency under these titles: Titles I, IV-A, IV-B, IV-C, IV-D, IV-E, X, XIV, XVI (AABD), XIX, and XXI of the Social Security Act; Chapter 2 of the Immigration and Nationality Act (8 U.S. C. 1521 et seq.), and Title V of Pub. L. 96-422, the Refugee Education Assistance Act of 1980.
Federal programs	Grant programs (public assistance and medical assistance) under: Titles I, IV-A, IV-B, IV-C, IV-D, IV-E, X, XIV, XVI (AABD), XIX, and XXI of the Social Security Act; Chapter 2 of the Immigration and Nationality Act (8 U.S. C. 1521 et seq.), and Title V of Pub. L. 96-422, the Refugee Education Assistance Act of 1980. Source: Title 45 - Public Welfare, Subtitle A, Department of Health and Human Services, Part 95, General Administration –Grant Programs (Public Assistance and Medical Assistance)
Functional module	A software application program's functional areas that automate public assistance program activities, for example, data collection, eligibility determination, reports.
Implementation APD (IAPD)	A written plan of action submitted for approval during the APD process to request Federal Financial Participation for system development costs. A Cost

Term	Definition
	Allocation Plan is submitted concurrently with the IAPD.
Large program	For purposes of cost allocation, a program is considered large if it has 5% or more of the duplicated recipient count of all programs benefiting from the system
Match rate	The percentage at which Federal public assistance agencies will fund State agency ADP systems and services. The match rate varies by program.
Planning APD (PAPD)	A written plan of action submitted for approval during the APD process to request Federal Financial Participation for system planning costs. A Cost Allocation Plan is submitted concurrently with the PAPD.
Program	*See Federal programs.* *See Software application program*.
Program Share of Cost %	An objective measure of Benefit Received by Federal and State public assistance programs from State agency computer systems, expressed as a percentage of total estimated/actual costs.
Reasonable method	A cost allocation methodology that can be used in many situations. For example, it can be used when allocating planning costs for a shared system development project. Some examples of reasonable methods include: 1. Equal shares for the major benefiting programs 2. Proportionate shares based on previous planning efforts Reasonable method cannot be used in an Implementation IAPD when software development costs are 50% or more of total system costs. *See Benefit Received.*
Share Amount ($)	In a Cost Allocation Plan exhibit, the dollar amount allocated to each benefiting program based on the budget and its Program Share of Cost %. For example, when the budget is $300,000, and the benefiting Program Share of Cost % is 33%, its Share Amount ($) is $100,000. The Share Amount ($) is calculated first, before applying the Federal match rate for FFP.
Shared costs	Costs for system functions benefiting two or more Federal or State programs *See direct costs.*
Small program	For purposes of cost allocation, a program is considered small if it has less than 5% of the duplicated recipient count of all programs benefiting from the system.
Software application program	A set of instructions within an automated computer system that helps State agencies implement public assistance programs. For example, a Child Support Enforcement computer system consists of multiple application programs to help staff locate, establish paternity, enforce child support orders, and collect and disburse child support payments.
Software development costs	The costs for the engineering and management activities needed to analyze, design and test software application programs. When preparing a Cost Allocation Plan, the software development activities whose costs can be

Term	Definition
	allocated are: 1-Project management 2-Requirements 3-Design 4-Development 5-Testing (unit testing through user acceptance testing) 6-Training (actual cost of training, but not costs for staff time during training) 7-Pilot (vendor staff but not state/local staff) 8-Deployment/rollout (vendor staff but not state/local staff)
State	The 50 U.S. States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, the Northern Mariana Islands, and Guam
State agency	The State organization directly responsible for administration of, or supervising the administration of, one or more programs eligible for Federal Financial Participation *(See FFP)*
State Share ($)	In a Cost Allocation Plan exhibit, the remaining dollar amount allocated to be paid by the State agency after subtracting the Federal Share ($) FFP amount. For example, when the budget is $300,000, and the benefiting Program Share of Cost % is 33%, the Share Amount ($) is $100,000. Next, the match rate (e.g., 50%) is applied, so that the Federal share ($) of FFP is $50,000 and the State Share ($) is $50,000.
Sub-Module	In a system allocation structure, a group of system activities within a Functional Module
System	Automated data processing (ADP) system.
Title IV-E Participation Rate	Used in the calculation of FFP for projects that supports the Child Welfare (title IV-E) program. The rate is the proportion of children served by the State or Tribal child welfare program that also meet title IV-E program eligibility requirements. Child welfare projects that meet Statewide Automated Child Welfare Information System requirements at 45 CFR Part 1355.50–57 may be eligible for 50% FFP for development activities. Non-SACWIS development efforts costs must apply the title IV-E participation rate to FFP claims. See Appendix E for additional information on calculating the FFP rate for child welfare projects.
Weight	A numeric indicator for the level of effort associated with system functionality, if the allocation base does not include level of effort. *See allocation base and complexity.*

Appendix B: Cost Allocation Resources

Code of Federal Regulations (CFR) Authorities

7 CFR 3015 and 3016: Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local government

7 CFR Part 277.18: "Food Stamp Program ADP Equipment and Services; Conditions for Federal Financial Participation"

31 CFR : "Money and Finance: Treasury"

45 CFR Part 95, Subpart A: Sets a two-year limit (15 months in some cases) for a State to claim Federal Financial Participation (FFP) in expenditures under approved State plans

45 CFR Part 95, Subpart E: Establishes requirements for preparation, submission, approval of, and adherence to State cost allocation plans for public assistance programs. These plans are customarily referred to as Public Assistance Cost Allocation Plans (PACAP) and are submitted to the Director, Division of Cost Allocation, for review and approval. Specific requirements for PACAP plans are found at 45 CFR 95.507.

NOTE: PACAP plans are not the same as the Cost Allocation Plan (CAP) described in the CAM Toolkit. PACAP plans are outside the scope of the CAM Toolkit.

45 CFR Part 95, Subpart F: Specifies the conditions for FFP in the cost of acquiring automated data processing (ADP) equipment and services. See Section 95.631, Cost identification for purpose of FFP claims: (a) Development costs, and (b) Operational costs.

45 CFR Part 95, Subpart G: Prescribes requirements concerning the computation of claims for FFP in the cost of equipment under public assistance programs

Office of Management and Budget Circulars

OMB Circular A-87 at 2 CFR 225: "Cost Principles for State, Local, and Indian Tribal Governments." Establishes principles and standards for determining costs applicable to grants, contracts, and other agreements with State and local governments

Information Memoranda

CMS-ACF-IM-08-01: Federal/State Information Technology Policy: Use of Enterprise Architectures In and Across States' Automated Human Services Information Systems.

ACF-CMS-FNS IM-11-18: This document provides guidance on a revision to the methodology for allocating costs to programs participating in an IS development project. The cost allocation that is approved for program operations/administration should not be used for these projects.

Guides and Handbooks

State Systems APD Guide. Provides guidance to help States prepare Advance Planning Documents (APDs) and Cost Allocation Plans for approval for Federal Financial Participation (FFP)

FNS Handbook 901: Describes the Food and Nutrition Service (FNS) policies and procedures under which State agencies may request approval and receive funding to develop automated data processing (ADP) systems that support the operation of FNS programs. Section 10, Cost Allocation Planning, provides information on State agency actions and responsibilities and FNS actions and responsibilities

Appendix C: Cost Allocation Lessons Learned

Building Cost Allocation Planning Teams

States have learned that building an effective cost allocation planning team is a critical success factor in preparing and gaining approval of Cost Allocation Plans. It is imperative that the State agency creates its cost allocation team early in the system planning process. This team should be cross-functional and should include representatives from program, technical, and financial management staff. Depending on the business environment, contractor staff may also need to be included.

On this cost allocation team, the technical team members communicate the system's technical structure. Program staff then use the system's technical structure as a framework to identify their program's functional usage of the system. Financial management staff helps to identify or establish cost reporting data to support the cost allocation to benefiting programs based on Benefit Received from system usage.

At the outset, the State agency cost allocation team should also establish communication with Federal benefiting program representatives. The State team can describe the cost allocation methodology approach it is considering and get helpful feedback from its Federal benefiting program representatives. The earlier in the cost allocation process the State and Federal representatives begin working together, the more likely there will be "no surprises" when the Cost Allocation Plan gets submitted for approval.

Access to Data for the Cost Allocation Methodology.

States have learned that when selecting a cost allocation methodology, it is important to consider the data the team will need in preparing the cost allocation. All cost allocation methods require data, either historical data from previous system development efforts or estimates/actuals from a current development project.

- For example, in preparing a Cost Allocation Plan for a system planning effort, you can use any reasonable method to allocate costs to benefiting programs. If the benefiting programs have done joint system planning before, a reasonable method is to allocate proportionate shares based on previous planning efforts. In that case, historical cost and level of effort data is needed to determine proportionate shares.

The Benefit Received cost allocation methodology requires data for each allocation base you select.

- For example, if you select screens, you will need data on all screens and their function in the system, the relative complexity of software development for each screen, and level of effort data for the software development work (either estimated or actual hours).

The cost allocation planning team needs to identify and communicate its data needs as early in the cost allocation process as possible. The team communicates its needs to State management, technical and financial staff, and contractors, if appropriate. With contracted work, be sure that the contract is written or modified to specify data collection and reporting needed to support the State agency cost allocation methodology.

Appendix D: Children's Bureau Secondary Cost Allocation

*For shared systems containing **Child Welfare** functionality.*

The CAM-TOOL generates **high-level** program share percentages (%) for each benefiting Federal program. The following table provides an example of how the CAM-TOOL would generate program share percentages for three Federal programs:

SUMMARY OF THE ESTIMATED PROJECT BUDGET				**Budget Amount:**	**$20,000,000.00**
Federal/State Program	**Program Share of Cost (%)**	**Share Amount ($)**	**Match Rate**	**Federal Share ($) FFP**	**State Share ($)**
SNAP	0.42277	$ 8,455,400.00	0.5	$4,227,700.00	$ 4,227,700.00
TANF	0.25262	$ 5,052,400.00	0	$ -	$ 5,052,400.00
Child Welfare*	0.32461	$ 6,492,200.00	0.5	$3,246,100.00	$ 3,246,100.00
TOTALS	1	$20,000,000.00		$7,473,800.00	$12,526,200.00

* *This assumes the multi-program system effort includes SACWIS functionality*.

Costs associated with the child welfare program require an additional level of cost allocation. States should work with ACF to ensure that child welfare information technology (IT) costs for shared systems are properly allocated in accordance with existing Federal guidance and regulations.

ACF has the authority to approve a state's cost allocation methodology that conforms to the primary program methodology during the development phase of a SACWIS project. Using this approach, common costs for child welfare-related functions are assigned to the title IV-E program; as long as the system's functional modules were being developed primarily for allowable SACWIS activities under the title IV-B and title IV-E programs. For example, in a SACWIS development effort for a multi-program system, title IV-E may cover a significant portion of the Child Welfare related share of the total system costs for SACWIS-related functionality.

However, for a non-SACWIS, development costs must be allocated to the benefiting child welfare related programs and the state must pay its share for any non-title IV-E foster care and adoption children based on the title IV-E participation rate.

Regardless of the type of system (SACWIS or non-SACWIS), title IV-E does not cover TANF, IV-D, FNS or CMS program costs. The other benefiting programs must pick up their allocation of shared and unique costs, regardless of whether the multiple operating division (multi-opdiv) system includes a SACWIS or a non-SACWIS CW system.

A supplementary blank cost allocation worksheet has been provided in the CAM-TOOL to capture information on the secondary cost allocation required for the Child Welfare share of costs.